

ABSTRACT OF THE DISCLOSURE

Provided is a method of manufacturing a semiconductor device includes forming an interlayer insulating film above a silicon (semiconductor) substrate, forming an lower layer of a lower-electrode conductive film on the interlayer insulating film while keeping the substrate temperature at a temperature higher than room temperature and lower than 300 °C, forming an upper layer of the lower-electrode conductive film on the lower layer and setting the upper and lower layers as the lower-electrode conductive film, forming a ferroelectric film on the lower-electrode conductive film, forming an upper-electrode conductive film on the ferroelectric film, and forming a ferroelectric capacitor by patterning the upper-electrode conductive film, the ferroelectric film, and the lower-electrode conductive film.